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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/606,249	06/26/2003	Tsutomu Suzuki	500.40652CX1	1549
20457	7590	02/23/2004	EXAMINER	
ANTONELLI, TERRY, STOUT & KRAUS, LLP 1300 NORTH SEVENTEENTH STREET SUITE 1800 ARLINGTON, VA 22209-9889			HO, ALLEN C	
			ART UNIT	PAPER NUMBER
			2882	

DATE MAILED: 02/23/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/606,249

Applicant(s)

SUZUKI ET AL.

Examiner

Allen C. Ho

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 June 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-4 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1 and 2 is/are rejected.
- 7) ☒ Claim(s) 3 and 4 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 26 June 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
- a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 0603.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

DETAILED ACTION

Specification

1. The abstract of the disclosure is objected to: line 8, --tube-- should be inserted before "and". Correction is required.
2. Cross reference to related application should include U. S. Patent No. 6,590,953 B2 corresponding to application 09/949,638.

Claim Objections

3. Claim 1 is objected to because of the following informalities: line 10, --tube-- should be inserted before "and". Appropriate correction is required.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claim 1 is rejected under 35 U.S.C. 103(a) as being unpatentable over Fujita *et al.* (U. S. Patent No. 5,703,921) in view of Peter (U. S. Patent No. 6,327,330 B1).

With regard to claim 1, Fujita *et al.* disclosed an x-ray CT scanner comprising: an x-ray tube (13) for radiating x-rays to a subject; an x-ray detector (17) for detecting x-rays that have penetrated the subject; a circular plate-like rotary member (11) with an opening for insertion of a

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subject and having the x-ray tube and the x-ray detector mounted thereon an opposing positions with respect to the opening; a support (31) for rotatably supporting the rotary member; and a rotary drive (inherent) for rotating the rotary member around the subject; wherein the x-ray tube and the x-ray detector are mounted on a side surface of the rotary member.

However, Fujita *et al.* failed to teach that a control unit relating to at least one of generation and detection of the x-rays is mounted on the side surface.

Peter disclosed an x-ray CT scanner, wherein a control units (11) relating to at least one of generation and detection of the x-rays is mounted on a side surface of the rotary member. Peter taught that this arrangement, in addition to tighter component integration, reduces data transmission rate from the rotary member to the support, thereby reducing data transmission errors (column 1, lines 40-60).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to mount a control unit relating to at least one of generation and detection of the x-rays is mounted on the side surface, since a person would be motivated to reduce the amount of data transmission errors.

With regard to claim 2, Fujita *et al.* in combination with Peter disclosed the x-ray CT scanner according to claim 1, wherein the rotary member further comprises: at least one unit mounting member (91) perpendicularly projected from the side surface at outer circumferential portions of the rotary member, the unit mounting member including an accommodation portion and a mounting portion erected around the accommodation portion (Fig. 12); and the control unit relating to at least one of generation and detection of the x-rays being mounted to the unit mounting member from an opening side.

Allowable Subject Matter

6. Claims 3 and 4 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

7. The following is a statement of reasons for the indication of allowable subject matter:

With regard to claim 3, the prior art fails to teach or fairly suggest that the mounting portion is integrally erected from the rotary member substantially perpendicular to the unit mounting surface of the rotary member as claimed.

With regard to claim 4, the prior art fails to teach or fairly suggest that the at a location near the accommodation portion the short side portion of the mounting portion is bent substantially perpendicular to the unit mounting surface of the rotary member, and the long side portion of the mounting portion is secured to an outer circumferential side end of the short side portion of the mounting portion as claimed.

Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

- (1) Tachizaki (U. S. Patent No. 6,314,157 B1) disclosed an arrangement for mounting units in a computed tomography system.
- (2) Schmidt (U. S. Patent No. 5,784,428) disclosed an x-ray CT apparatus having a circular plate-like rotary member.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Allen C. Ho whose telephone number is (571) 272-2491. The examiner can normally be reached on Monday - Friday from 8:00 am - 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward J. Glick can be reached at (571) 272-2490. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (571) 272-1550.

A handwritten signature in black ink that reads "Allen C. Ho". The signature is written in a cursive, flowing style.

Allen C. Ho
Patent Examiner
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ACH